IFWO

RAW SEQUENCE LISTING DATE: 08/30/2004
PATENT APPLICATION: **US/10/784,528** TIME: 14:56:52

Input Set : **N:\Crf3\RULE60\10784528.raw.txt**
Output Set: **N:\CRF4\08302004\J784528.raw**

<110> APPLICANT: Case Western Reserve University
Brown, Arthur M.
Wible, Barbara A.
<120> TITLE OF INVENTION: Methods of Inducing Apoptosis in Hyperproliferative Cells
<130> FILE REFERENCE: 22884/04047
<140> CURRENT APPLICATION NUMBER: US/10/784,528
<141> CURRENT FILING DATE: 2004-02-23
<150> PRIOR APPLICATION NUMBER: US/10/000,778
<151> PRIOR FILING DATE: 2001-10-31
<160> NUMBER OF SEQ ID NOS: 2
<170> SOFTWARE: PatentIn version 3.1
<210> SEQ ID NO: 1
<211> LENGTH: 1725
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 1

atgaagatca aagagcttta ccgacgacgc tttccccgga agaccctggg gccctctgat 60
ctctcccttc tctctttgcc ccctggcacc tctcctgtag gctcccctgg tcctctagct 120
cccattcccc caacgctgtt ggcccctggc accctgctgg gccccaagcg tgaggtggac 180
atgcaccccc ctctgcccca gcctgtgcac cctgatgtca ccatgaaacc attgcccttc 240
tatgaagtct atggggagct catccggccc accacccttg catccacttc tagccagcgg 300
tttgaggaag cgcactttac ctttgccctc acaccccagc aagtgcagca gattcttaca 360
tccagagagg ttctgccagg agccaaatgt gattatacca tacaggtgca gctaaggttc 420
tgtctctgtg agaccagctg cccccaggaa gattattttc cccccaacct ctttgtcaag 480
gttaatggga aactgtgccc cctgccgggt taccttcccc caaccaagaa tggggccgag 540
cccaagaggc ccagccgccc catcaacatc acacccctgg ctcgactctc agccactgtt 600
cccaacacca ttgtggtcaa ttggtcatct gagttcggac ggaattactc cttgtctgtg 660
tacctggtga ggcagttgac tgcaggaacc cttctacaaa aactcagagc aaagggtatc 720
cggaacccag accactcgcg ggcactgatc aaggagaaat tgactgctga ccctgacagt 780
gaggtggcca ctacaagtct ccgggtgtca ctcatgtgcc cgctagggaa gatgcgcctg 840
actgtccctt gtcgtgccct cacctgtgcc cacctgcaga gcttcgatgc tgccctttat 900
ctacagatga atgagaagaa gcctacatgg acatgtcctg tgtgtgacaa gaaggctccc 960
tatgaatctc ttatcattga tggtttattt atggagattc ttagttcctg ttcagattgt 1020
gatgagatcc aattcatgga agatggatcc tggtgcccaa tgaaacccaa gaaggaggca 1080
tctgaggttt gccccccgcc agggtatggg ctggatggcc tccagtacag cccagtccag 1140
gggggagatc catcagagaa taagaagaag gtcgaagtta ttgacttgac aatagaaagc 1200
tcatcagatg aggaggatct gcccccctacc aagaagcact gttctgtcac ctcagctgcc 1260
atcccggccc tacctggaag caaaggagtc ctgacatctg gccaccagcc atcctcggtg 1320
ctaaggagcc ctgctatggg cacgttgggt ggggatttcc tgtccagtct cccactacat 1380
gagtacccac ctgccttccc actgggagcc gacatccaag gtttagattt attttcattt 1440
cttcagacag agagtcagca ctatggcccc tctgtcatca cctcactaga tgaacaggat 1500
gcccttggcc acttcttcca gtaccgaggg acccccttctc actttctggg cccactggcc 1560
cccacgctgg ggagctccca ctgcagcgcc actccggcgc cccctcctgg ccgtgtcagc 1620

RAW SEQUENCE LISTING DATE: 08/30/2004
PATENT APPLICATION: **US/10/784,528** TIME: 14:56:52

Input Set : **N:\Crf3\RULE60\10784528.raw.txt**
Output Set: **N:\CRF4\08302004\J784528.raw**

45 agcattgtgg cccctggggg ggccttgagg gaggggcatg gaggacccct gccctcaggt 1680
46 ccctctttga ctggctgtcg gtcagacatc atttccctgg actga 1725
48 <210> SEQ ID NO: 2
49 <211> LENGTH: 574
50 <212> TYPE: PRT
51 <213> ORGANISM: Homo sapiens
52 <400> SEQUENCE: 2
53 Met Lys Ile Lys Glu Leu Tyr Arg Arg Arg Phe Pro Arg Lys Thr Leu
54 1 5 10 15
55 Gly Pro Ser Asp Leu Ser Leu Leu Ser Leu Pro Pro Gly Thr Ser Pro
56 20 25 30
57 Val Gly Ser Pro Gly Pro Leu Ala Pro Ile Pro Pro Thr Leu Leu Ala
58 35 40 45
59 Pro Gly Thr Leu Leu Gly Pro Lys Arg Glu Val Asp Met His Pro Pro
60 50 55 60
61 Leu Pro Gln Pro Val His Pro Asp Val Thr Met Lys Pro Leu Pro Phe
62 65 70 75 80
63 Tyr Glu Val Tyr Gly Glu Leu Ile Arg Pro Thr Thr Leu Ala Ser Thr
64 85 90 95
65 Ser Ser Gln Arg Phe Glu Glu Ala His Phe Thr Phe Ala Leu Thr Pro
66 100 105 110
67 Gln Gln Val Gln Gln Ile Leu Thr Ser Arg Glu Val Leu Pro Gly Ala
68 115 120 125
69 Lys Cys Asp Tyr Thr Ile Gln Val Gln Leu Arg Phe Cys Leu Cys Glu
70 130 135 140
71 Thr Ser Cys Pro Gln Glu Asp Tyr Phe Pro Pro Asn Leu Phe Val Lys
72 145 150 155 160
73 Val Asn Gly Lys Leu Cys Pro Leu Pro Gly Tyr Leu Pro Pro Thr Lys
74 165 170 175
75 Asn Gly Ala Glu Pro Lys Arg Pro Ser Arg Pro Ile Asn Ile Thr Pro
76 180 185 190
77 Leu Ala Arg Leu Ser Ala Thr Val Pro Asn Thr Ile Val Val Asn Trp
78 195 200 205
79 Ser Ser Glu Phe Gly Arg Asn Tyr Ser Leu Ser Val Tyr Leu Val Arg
80 210 215 220
81 Gln Leu Thr Ala Gly Thr Leu Leu Gln Lys Leu Arg Ala Lys Gly Ile
82 225 230 235 240
83 Arg Asn Pro Asp His Ser Arg Ala Leu Ile Lys Glu Lys Leu Thr Ala
84 245 250 255
85 Asp Pro Asp Ser Glu Val Ala Thr Thr Ser Leu Arg Val Ser Leu Met
86 260 265 270
87 Cys Pro Leu Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr
88 275 280 285
89 Cys Ala His Leu Gln Ser Phe Asp Ala Ala Leu Tyr Leu Gln Met Asn
90 290 295 300
91 Glu Lys Lys Pro Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro
92 305 310 315 320
93 Tyr Glu Ser Leu Ile Ile Asp Gly Leu Phe Met Glu Ile Leu Ser Ser
94 325 330 335

RAW SEQUENCE LISTING DATE: 08/30/2004
PATENT APPLICATION: **US/10/784,528** TIME: 14:56:52

Input Set : **N:\Crf3\RULE60\10784528.raw.txt**
Output Set: **N:\CRF4\08302004\J784528.raw**

```
95      Cys Ser Asp Cys Asp Glu Ile Gln Phe Met Glu Asp Gly Ser Trp Cys
96                  340                 345                 350
97      Pro Met Lys Pro Lys Lys Glu Ala Ser Glu Val Cys Pro Pro Pro Gly
98              355                 360                 365
99      Tyr Gly Leu Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro
100         370                 375                 380
101      Ser Glu Asn Lys Lys Lys Val Glu Val Ile Asp Leu Thr Ile Glu Ser
102      385                 390                 395                 400
103      Ser Ser Asp Glu Glu Asp Leu Pro Pro Thr Lys Lys His Cys Ser Val
104                      405                 410                 415
105      Thr Ser Ala Ala Ile Pro Ala Leu Pro Gly Ser Lys Gly Val Leu Thr
106                  420                 425                 430
107      Ser Gly His Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr
108              435                 440                 445
109      Leu Gly Gly Asp Phe Leu Ser Ser Leu Pro Leu His Glu Tyr Pro Pro
110          450                 455                 460
111      Ala Phe Pro Leu Gly Ala Asp Ile Gln Gly Leu Asp Leu Phe Ser Phe
112      465                 470                 475                 480
113      Leu Gln Thr Glu Ser Gln His Tyr Gly Pro Ser Val Ile Thr Ser Leu
114                      485                 490                 495
115      Asp Glu Gln Asp Ala Leu Gly His Phe Phe Gln Tyr Arg Gly Thr Pro
116                  500                 505                 510
117      Ser His Phe Leu Gly Pro Leu Ala Pro Thr Leu Gly Ser Ser His Cys
118              515                 520                 525
119      Ser Ala Thr Pro Ala Pro Pro Pro Gly Arg Val Ser Ser Ile Val Ala
120          530                 535                 540
121      Pro Gly Gly Ala Leu Arg Glu Gly His Gly Gly Pro Leu Pro Ser Gly
122      545                 550                 555                 560
123      Pro Ser Leu Thr Gly Cys Arg Ser Asp Ile Ile Ser Leu Asp
124                      565                 570
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/30/2004
PATENT APPLICATION: **US/10/784,528** TIME: 14:56:53

Input Set : **N:\Crf3\RULE60\10784528.raw.txt**
Output Set: **N:\CRF4\08302004\J784528.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 4

VERIFICATION SUMMARY DATE: 08/30/2004
PATENT APPLICATION: **US/10/784,528** TIME: 14:56:53

Input Set : **N:\Crf3\RULE60\10784528.raw.txt**
Output Set: **N:\CRF4\08302004\J784528.raw**